

chain nodes:

1 2 3 4 5 6 7 8 10 11 12

chain bonds:

1-7 2-3 2-12 3-4 4-5 4-6 7-8 8-10 10-11

exact/norm bonds:

2-3 2-12 3-4 4-6 7-8 8-10 10-11

exact bonds:

1-7 4-5

Match level:

1:CLASS2:Atom 3:CLASS4:CLASS5:CLASS6:CLASS7:Atom 8:CLASS10:Atom 11:CLASS12:CLASS Generic attributes :

2:

Saturation

: Unsaturated

10:

Saturation

: Unsaturated

fragments assigned product role:

containing 1

fragments assigned reactant/reagent role:

containing 2

=> d his

(FILE 'HOME' ENTERED AT 09:25:19 ON 23 APR 2007)

FILE 'REGISTRY' ENTERED AT 09:25:25 ON 23 APR 2007

E PHOSPHOROUS OXYCHLORIDE/CN

L1 1 S E4

E PHOSPHORIC TRICHLORIDE/CN

L2 1 S E3

E DIPHENYL CHLOROPHOSPHATE/CN

L3 1 S E3

FILE 'CASREACT' ENTERED AT 09:27:46 ON 23 APR 2007

L4 STRUCTURE UPLOADED

L5 0 S L4

L6 STRUCTURE UPLOADED

L7 . 0 S L6

L8 4 S L6 FUL

=> d crdref 1-4

L8 ANSWER 1 OF 4 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 10

F₃C-C-NH
$$i-Pr$$
 $pr-i$
 $\frac{1 \cdot SOC12}{2 \cdot PC15}$
 $i-Pr$
 $pr-i$
 $63%$

REF: Canadian Journal of Chemistry, 78(5), 583-589; 2000

L8 ANSWER 2 OF 4 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3

$$F_3C-C-NH$$

Me

POC13, PC15

 $F_3C-C=N$

Me

REF: Khimiko-Farmatsevticheskii Zhurnal, 30(11), 26-28; 1996

RX(3) OF 3

REF: Khimiko-Farmatsevticheskii Zhurnal, 30(11), 26-28; 1996

L8 ANSWER 3 OF 4 CASREACT COPYRIGHT 2007 ACS on STN

RX(6) OF 9

REF: Monatshefte fuer Chemie, 111(5), 1087-96; 1980

RX(8) OF 9

REF: Monatshefte fuer Chemie, 111(5), 1087-96; 1980

L8 ANSWER 4 OF 4 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 88

$$F_3C-C-NH$$
 CF_3
 $EC13$
 $F_3C-C=N$
 CF_3

REF: Monatshefte fuer Chemie, 110(1), 63-88; 1979

RX(29) OF 88

$$\begin{array}{c|c}
 & C1 \\
 & NH-C-CF_3
\end{array}$$
Me

10%

REF: Monatshefte fuer Chemie, 110(1), 63-88; 1979

RX(30) OF 88

Me Me Me Me Me
$$\frac{\text{C1}}{\text{Me}}$$
Me $\frac{\text{C1}}{\text{Me}}$
Me $\frac{\text{C1}}{\text{Me}}$
Me $\frac{\text{C1}}{\text{Me}}$

REF: Monatshefte fuer Chemie, 110(1), 63-88; 1979

RX(48) OF 88

REF: Monatshefte fuer Chemie, 110(1), 63-88; 1979

RX(49) OF 88

REF: Monatshefte fuer Chemie, 110(1), 63-88; 1979

RX(50) OF 88

REF: Monatshefte fuer Chemie, 110(1), 63-88; 1979

=>

=> d his

(FILE 'HOME' ENTERED AT 09:25:19 ON 23 APR 2007)

FILE 'REGISTRY' ENTERED AT 09:25:25 ON 23 APR 2007

E PHOSPHOROUS OXYCHLORIDE/CN

L1 1 S E4

E PHOSPHORIC TRICHLORIDE/CN

L2 1 S E3

E DIPHENYL CHLOROPHOSPHATE/CN

L3 1 S E3

FILE 'CASREACT' ENTERED AT 09:27:46 ON 23 APR 2007

L4 STRUCTURE UPLOADED

L5 0 S L4

L6 STRUCTURE UPLOADED

L7 0 S L6

L8 4 S L6 FUL

FILE 'REGISTRY' ENTERED AT 09:31:34 ON 23 APR 2007

L9 22 S TERTIARY AMINE

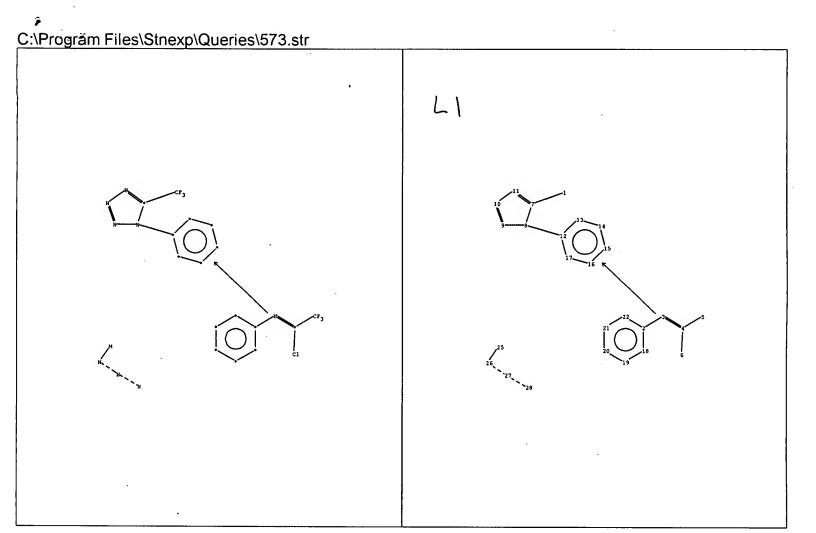
FILE 'CASREACT' ENTERED AT 09:34:16 ON 23 APR 2007

L10 1579 S TERTIARY AMINE

=> s 110 and 18

L11 0 L10 AND L8

=>



chain nodes:

1 3 4 5 6 25 26 27 28

ring nodes:

2 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

chain bonds:

1-7 2-3 3-4 4-5 4-6 8-12 25-26 26-27 27-28

ring bonds:

2-18 2-22 7-8 7-11 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17 18-19 19-20 20-21 21-22

exact/norm bonds:

2-3 3-4 7-8 7-11 8-9 8-12 9-10 10-11 26-27 27-28

exact bonds:

1-7 4-5 4-6 25-26

normalized bonds:

2-18 2-22 12-13 12-17 13-14 14-15 15-16 16-17 18-19 19-20 20-21 21-22

Match level:

1:CLASS2:Atom 3:CLASS4:CLASS5:CLASS6:CLASS7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 25:CLASS26:CLASS27:CLASS28:CLASS

fragments assigned product role:

containing 1

fragments assigned reactant/reagent role:

containing 2 containing 25

=> d his

(FILE 'HOME' ENTERED AT 09:48:18 ON 23 APR 2007)

FILE 'CASREACT' ENTERED AT 09:48:40 ON 23 APR 2007

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 2 S L1 FUL

=> d crdref 1-2

L3 ANSWER 1 OF 2 CASREACT COPYRIGHT 2007 ACS on STN

RX(14) OF 81

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 1850810, 25 Oct

2006

CON: room temperature

RX(15) OF 81

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.; 2006

CON: room temperature

RX(16) OF 81

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.; 2006

CON: room temperature

RX(17) OF 81

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.;

CON: room temperature

RX(38) OF 81 - 2 STEPS

$$F_3$$
C-C-N

Me

 $\frac{1. \text{ NaN3, MeCN}}{2. \text{ F3CCO2H, AcOH}}$
 CF_3
 CF_3

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.;

STEP(1) room temperature STEP(2) reflux CON:

RX(39) OF 81 - 2 STEPS

Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.; STEP(1) room temperature STEP(2) room temperature REF:

CON:

RX(40) OF 81 - 2 STEPS

OMe OMe CHOMe
$$\frac{1. \text{ NaN3, MeCN}}{2. \text{ HCl, Water, Me2CO}}$$
 No CF3

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.; 2006

CON: STEP(1) room temperature STEP(2) room temperature

RX(41) OF 81 - 2 STEPS

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.; 2006

CON: STEP(1) room temperature

STEP(2) reflux

L3 ANSWER 2 OF 2 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 12

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(2) OF 12

$$F_3$$
C-C=N

Me

NaN3, MeCN

 CF_3
 CF_3

91%

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(3) OF 12

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(4) OF 12

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(5) OF 12

F: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(6) OF 12

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(7) OF 12

$$O_2N$$
 $N = C - CF_3$
 $N = NO_2$
 $N = NO_2$

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(8) OF 12

$$C1$$
 $N=C-CF_3$
 $N=0$
 $N=0$

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(9) OF 12

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

RX(12) OF 12

$$F_3$$
C-C=N

Nan3, DMF

Nan3, DMF

70%

REF: Journal of Fluorine Chemistry, 99(1), 83-85; 1999

=>